DOCUMENT RESUME

ED 387 268 PS 023 653

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TITLE Domain Importance and Involvement: Relations between Domain Self-Concepts and General Self-Esteem in Preadolescence.
PUB DATE Apr 95
NOTE 41p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 18-22, 1995).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Elementary School Students; Intermediate Grades; Middle Schools; Research Problems; *Self Concept; *Self Esteem; Social Science Research; *Student Attitudes
IDENTIFIERS *Domain Knowledge; *Importance Ratings; Middle School Students

ABSTRACT

This study examined the role that domain importance plays in mediating the relations between domain-specific (such as verbal ability, physical appearance, opposite sex relations, and honesty) and general self-perceptions. Focusing on two previous studies by Hoge and McCarthy (1984) and Marsh (1986), the current study was designed to address the shortcomings of previous research. The study identified four shortcoming of previous studies, namely a lack of variability among the domains sampled, participant homogeneity, a potentially faulty operationalization of domain importance, and the use of single-item rather than multi-item scales to assess importance. The study then questioned 168 middle school students about importance and self-concept, finding that self-concept in all domains was related to general self-esteem, and that importance was generally related to appropriate facets of self-concept and to general self-esteem. The relations between self-concept in some domains and general self-esteem appeared to depend on how important the domain was to the individual and on how importance was assessed. (Contains 55 references.) (MDM)

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ED 387 268

Running Head: IMPORTANCE AND INVOLVEMENT

Domain Importance and Involvement:
Relations between Domain Self-Concepts and General Self-Esteem
in Preadolescence

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Paper presented at the 1995 Annual Meeting of the American Educational Research Association, San Francisco, CA

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Abstract

Several theoretical conceptualizations of self-concept suggest that the value placed upon a domain should mediate the relations between self-concept in that domain and general self-esteem. However, evidence to support this position had not emerged in previous studies. In the present study, four methodological shortcomings of two prior studies were identified and corrected in an attempt to further explore the role of importance. Specifically, self-concept was assessed in a wider variety of domains, participant variability was increased, multi-item subscales were used to assess importance, and importance was assessed in alternative ways. Results provided the strongest evidence to date in support of the role of importance as a mediator of the relations between domain self-concept and general self-esteem.

Relations Between Domain Self-Concepts and General Self-Esteem: The Importance of Importance and Involvement

Plain common sense suggests that what and how we think of ourselves is important to our functioning in many areas of our lives. However, just how our self-perceptions relate to our behavior and contribute to our identity are issues that have yet to be resolved. For example, general self-esteem has often been considered an important and perhaps necessary component of the development of competence in any given domain (Harter, 1979), but its relation to measures of achievement and performance in specific domains is often insignificant (Marsh, 1990, 1993). In addition, although the relations between domain-specific self-perceptions and achievement in corresponding domains are usually strong, the relations between domain-specific and general self-perceptions are often quite weak (Marsh, 1990; Marsh, Byrne, & Shavelson, 1988). Thus, the relation of general self-esteem to specific facets of achievement remains unclear.

A critical step in the process of addressing these sorts of issues is a thorough examination of the relations between general self-esteem, which is the most commonly considered aspect of self-esteem (McEachron-Hirsch, 1993), and domain-specific self-concepts. One promising avenue of research into these connections involves domain importance, or the value individuals place on specific areas of self-perception. It often has been suggested that the personal importance of a domain may mediate the relation between self-concept in that domain and general self-esteem. Although theoretically tenable, (Coopersmith, 1967; Harter, 1982, 1983, 1986; Hoge & McCarthy, 1984; James, 1890/1963; Marsh, 1986; Rosenberg, 1965, 1979; Wylie, 1974), this hypothesis has yet to receive strong empirical support. "However, the theoretical notion has too much intuitive appeal to be completely rejected, and so further examination of the issues is needed" (Marsh, 1986, p. 1233).

The present study represents an attempt to further examine the role that importance plays in mediating the relations between domain-specific and general self-perceptions. It builds upon the foundations laid by two previous studies that addressed potential roles domain importance might play in connecting domain-specific self-concepts with general self-esteem (Hoge & McCarthy, 1984; Marsh, 1986). Although strong support for the 'importance of importance' did not emerge in either of these studies, researchers in both cases concluded that methodological problems were to blame for these results. Specifically, a lack of variability among the domains sampled, participant homogeneity, and a potentially faulty operationalization of domain importance have been cited as likely sources of these problems (Marsh, 1986). Another source that has not been suggested previously is the use of single-

item rather than multi-item scales to assess importance. The present study was designed to address each these four methodological issues.

In the next sections, the theoretical framework for the present study will be outlined. First, a discussion of the model of self-concept that guides this research is presented; theoretical bases for the importance of domain importance follow.

The Structure and Measurement of Self-Concept

The Hierarchical Model of Self-Concept

Based on an extensive review of the self-concept literature, Shavelson, Hubner, and Stanton (1976) determined that an explicit, guiding model of self-concept was conspicuously absent from the field and that the quality of research had suffered as a result. So, Shavelson et al. (1976) presented the first detailed model of the structure of self-concept and urged researchers to set to the task of testing it. Their model is based upon the assumptions that self-concept is, among other things, "multifaceted", "organized", "hierarchical", and "differentiable" (Shavelson et al., 1976, p. 411-415). Here, the terms "multifaceted" and "organized" refer to the apparent coding of one's experiences into a system of categories to facilitate one's understanding of the world (Bruner, 1958) and understanding of oneself. Jersild (1952) found evidence that children's free-form self-descriptions typically fall into the categories of family, friends, school, social acceptance, physical attractiveness, and ability, but others have reported differences in the number and type of categories used across cultures (e.g., Lambert & Klineberg, 1967) and educational contexts (e.g., Sears, 1963). Thus, self-perceptions appear to be organized, but no set of categories or facets appears to be universal or context-free.

To integrate several varied conceptualizations of self-concept, Shavelson et al. (1976) proposed a hierarchical model to represent the structure of self-concept. This model bears some resemblance to the hierarchical representations of intellectual abilities proposed by Vernon (1950) and Burt (1949) in that a general, common factor (general self-esteem) appears at the apex and more specific factors (academic, social, moral, etc.) are represented at the lower levels. By relating the multiple facets of self-concept to one another and to general self-concept, this model provides a basis from which logical empirical exploration of the internal nomological network of self-concept might proceed (Byrne, 1984).

Finally, by asserting that the construct of self-concept is "differentiable from other constructs with which it is related" (p. 415), Shavelson et al. (1976) provide theoretical support for the investigation of specific external connections of the nomological network of self-concept, that is, they link specific domains of activity to *specific facets* of self-concept rather than to *general* self-concept. For example, a stronger relation between *academic* self-

concept and academic achievement than between *general* self-concept and academic achievement should be expected. Likewise, *dance* self-concept is likely to be more strongly related to interest, involvement, and competence in dance than *general* self-concept is. As mentioned earlier, support for such specificity of relations has since been been forthcoming (e.g., Marsh, 1990, 1992, 1993).

Theory-Based Measurement of Self-Concept

Based on the Shavelson et al. (1976) model and related recommendations, Marsh and his colleagues (Self-Description Questionnaires-I, Marsh, 1988; -II, Marsh, 1990a; -III; Marsh, 1989a) developed an age-graded series of multi-dimensional self-concept instruments and have detailed the validation and use of these instruments in over one hundred articles in the past twelve years. In the SDQ instruments, multiple subscales are used to assess several facets or domains that correspond to categories into which self-perceptions are often organized. Eight subscales are common to the three SDQ instruments (General Self-Esteem, General School, Mathematics, Verbal, Parent Relations, Peer Relations, Physical Abilities, and Physical Appearance); the SDQ-II adds two additional scales to this core group (Emotional Stability and Honesty-Trustworthiness) and splits the Peer Relations subscale into Same Sex and Opposite Sex Relations. The SDQ-III adds another two scales (Problem-Solving/Creativity and Spirituality/Religiosity) for a total of thirteen. Response formats, item wordings, and subscale lengths differ slightly across these scales so that the common subscales are not identical, but the construct tapped by corresponding subscales has been shown to be comparable across these instruments (Marsh, 1989b). Each member of the SDQ series (SDQ-I, Marsh, 1988; SDQ-II, Marsh, 1990a; SDQ-III, Marsh, 1989a) consistently demonstrates more than acceptable psychometric qualities (e.g., Marsh, 1988, 1990, 1991, 1992).

General and Specific Facets of Self-Perception

General Self-Esteem

As researchers have shifted their focus from general to specific facets of self-concept, "the role of general self-concept has become less clear," (Marsh, 1986, p. 1224). General self-concept is at the apex of the hierarchical model; in other models its link to an immense array of self-characteristics is unclear (Harter, 1985, 1986) and often unspecified (Piers, 1984; Coopersmith, 1967, 1987).

From the Shavelson et al. (1976) and Marsh (1986) perspective, general self-esteem is the broad perception of self-worth that may be relevant to any given circumstance though it is specific to none. Rosenberg (1965) based the development of the Self-Esteem Scale (SES) on this definition of general self-

esteem. Composed of only ten items, the SES addresses only broad, non-content related self-perceptions; its unidimensionality has been supported through the use of exploratory factor analysis (Hensley, 1977; Simpson & Boyal, 1975).

Each SDQ instrument includes a general self-esteem scale that is based on the SES (Marsh, 1988; Marsh, 1990a; Marsh, 1989a). By including this scale in each these instruments, Marsh has been able to relate general self-esteem to a well-defined third order general self-concept factor derived from SDQ responses using hierarchical confirmatory factor analysis (Marsh, 1987). The general self-concept factor is more strongly related to general self-esteem as assessed by this subscale and to non-academic (i.e., social, emotional, and physical) self-concepts than to academic self-concepts.

Correlations between Domain-Specific Self-Concepts and General Self-Esteem

An exploration of the unweighted relations between domain-specific self-concepts and general self-esteem is a precursor to the application of a differential weighting scheme to these relations. Correlations between domain-specific self-concepts and general self-esteem are generally low to moderate (ranging from .23 to .66) for both adult and adolescent samples (Harter, 1985; Marsh, 1986; Vispoel, 1993a, 1993b, 1995). Thus, domain-specific self-perceptions tend to be related to general self-esteem, but the size of the correlations leaves room for the improvement that differential weighting may provide.

The Potential Role of Importance

The philosophical foundations for a mediating influence of domain importance on the relations between domain-specific self-perceptions and general self-esteem can be traced to the writings of William James. James (1890/1963) suggested that one's self-perceptions in areas of great personal relevance and importance should have a greater impact on one's overall sense of self-worth than one's self-perceptions in areas of relative irrelevance or unimportance:

> I, who for the time have staked my all on being a psychologist, am mortified if others know much more psychology than I. But I am contented to wallow in the grossest ignorance of Greek. My deficiencies there give me no sense of personal humiliation at all. Had I 'pretensions' to be a linguist, it would have been just the reverse. (p. 310)

Although Coopersmith (1967) and Wylie (1974) each acknowledged the theoretical merit of using a weighting scheme, Wylie (1974) went so far as to call for the development of a differential weighting scheme to reflect

"perceived (domain) salience" (p. 48). However, each of these researchers also expressed reservations about the ability of instruments to assess perceptions of importance accurately. Likewise, Rosenberg (1982) emphasized the selective, implicitly weighted nature of self-perceptions but also pointed out measurement limitations due to the subjectivity of self-understanding. Thus, any understanding of the function of the importance appears to be constrained both by factors related to the nature of self-understanding as well as by those involved in its measurement.

The practice of differentially weighting achievement and aptitude test items in the cognitive domains is generally rejected by measurement specialists on the basis of parsimony (Bayuk, 1973; Rozeboom, 1979; Sabers & White, 1969; Wainer, 1976). A number of weighting schemes have been examined, but few have been found to improve the reliability or predictive validity of test scores derived from simple unit weighting in a consistent manner. It is not clear, however, how relevant these results are to the present application of differential weighting. In this case, differential weighting is proposed to take place at the subscale rather than the item level. Additionally, the theoretical basis for weighting is to improve consistency between the content of a psychological construct as it is perceived by the examinee and the content of the construct as it is understood by the researcher. On the other hand, it is well understood by this researcher that the burden of proof in this instance is a heavy one.

In spite of these constraints, the theoretical strength of the argument for a mediating effect of domain importance on the relation between domain self-concepts and general self-concept necessitates continued investigation into this issue. Several independently derived notions about the function of importance add further credibility to this issue, and are discussed next.

The Measurement of Domain Importance

In their attempts to address the issue of importance as it relates to self-concept, researchers have used three general strategies for obtaining importance ratings. Although none of these strategies has received much empirical support, none has dealt a major blow to the strength of the issue, either. Each of these strategies will be discussed briefly. Arguments for other strategies, on which the present study focuses, will be presented in subsequent sections.

Harter's Discrepancy Model

Harter (1982, 1983, 1986) has supported the Jamesian perspective on the issue of importance as it relates to self-concept. Her position on this issue led her to develop a scale that may be used to supplement the Self-Perception Profile for Children (SPPC; Harter, 1985), a multi-faceted self-concept inventory. The ten items on the importance scale correspond in pairs to the five domain-specific subscales represented on the SPPC: School Competence,

Athletic Ability, Physical Appearance, Social Competence, and Behavioral Conduct. Each of the two domain-specific items assesses the general importance of behaviors, feelings, or competency in that domain. To calculate the "discrepancy scores", which Harter considers to be more relevant to general self-worth than the domain-specific self-perception scores in and of themselves, Harter subtracts the mean SPPC domain subscale score from the mean of the corresponding importance score in domains for which the importance score is high. The smaller the resulting number, or discrepancy, the better for general self-concept. According to this model, then, individuals for whom self-perception patterns are well matched by patterns of importance in corresponding domains will have higher general self-esteem than individuals for whom these patterns are more discrepant.

To back her claims, Harter (1986) reports a correlation of -.76 between the mean discrepancy score and the mean general self-worth scale score in a group of sixty 5th and 6th graders. Using a sample of thirty low self-worth, thirty medium self-worth, and thirty high self-worth fifth, 6th and 7th graders, Harter found mean discrepancy scores of -.27, -.62, and -1.2 respectively. Across these groups, the correlation of these scores with the general self-worth score was -.67.

Even with this correlational support Harter's model can be criticized for several reasons. First, correlations of these magnitudes have not been replicated. In addition, there are problems with Harter's operationalization of the discrepancy model which stem mostly from the nature of the discrepancy score calculation. Merely subtracting a score from one scale from the score from an entirely different scale does not necessarily retain the meaningfulness of either score alone. Therefore, the usefulness of this technique of assessing importance is still in doubt.

Hoge and McCarthy's Interactive Model

Hoge and McCarthy (1984) present a different operationalization of the Jamesian perspective. In their model, which is based on Rosenberg's interactive hypothesis (1965, 1979), importance and self-concept interact in such a way that a positive self-concept rating in an important domain will contribute positively to general self-concept ratings while a negative self-concept rating in an important domain will detract from general self-concept. In unimportant domains, neither positive nor negative self-concept ratings should significantly affect general self-concept. Thus, the contribution of a given domain of self-concept to general self-concept depends upon the importance of that domain.

Note that this model is similar to Harter's in that self-concept in a domain contributes to general self-esteem only when importance is high. However, when both self-concept and importance are high, the interactive model predicts that the effect on general self-esteem will be a strong positive one. In the same situation, the discrepancy model predicts that the effect will

be neutral, that is, the discrepancy will be zero. Only when a low self-concept is combined with high importance does importance affect the relations between self-concept and general self-esteem, according to the discrepancy model.

To test their interactive model, Hoge and McCarthy (1984) administered several instruments to 1,528 7th through 11th grade American students in both public and parochial schools. The Self-Esteem Scale (SES; Rosenberg, 1965) and the Self-Esteem Inventory (SEI; Coopersmith, 1967) were used to measure general self-esteem. A nine-item scale was developed to assess domain-specific self-concept and domain importance. Two ratings, one of accuracy and one of importance, were obtained for each of eight specific areas plus one area of personal choice, indicated by an open-ended response.

In their analysis of these data, Hoge and McCarthy (1984) calculated sets of domain importance ratings at the total sample, school, and individual levels. Next, they obtained regression coefficients for each dimension of self-concept by regressing general self-esteem scores on the set of nine specific domain scores. Then, they multiplied either the regression coefficients or one of the sets of importance ratings by the parallel self-concept domain scores and summed these products into across-domain totals. Finally, they estimated the correlations for each of these totals with each measure of general self-esteem. In all cases, these correlations were lower for the SEI than for the SES; therefore, only results pertaining to the SES will be discussed further.

Only three weighting schemes resulted in significant gains over the unweighted sum. Of these, the total comprising the specific dimensions weighted by their regression coefficients was the most effective and perhaps the most theoretically sound; the other two schemes were post hoc transformations without basis in self-concept or measurement theory. Surprisingly, totals based on importance scores calculated from individual data were not as strongly correlated with general self-concept as even the unweighted domain scores.

Hoge and McCarthy (1984) concluded that group-established domain importance is more influential on individual self-esteem than is individually established domain importance. However, it should be noted that none of the weighting schemes, including the unweighted total, resulted in a strong correlation between domain-specific self-concepts and general self-esteem. At best, a combination of domain-specific self-concepts and domain importance ratings could only account for about 21% of the variance in general self-esteem.

Even without providing any support for the use of importance scores to weight domain self-concept scores, Hoge and McCarthy have not necessarily discredited the interaction hypothesis. Marsh (1986) pointed out several flaws in the Hoge and McCarthy (1984) study that may have contributed to their largely insignificant findings. First, Hoge and McCarthy

used raw domain-specific self-concept ratings in computing their interaction terms. As such, the effects of positive self-ratings in unimportant domains and negative self-ratings in important domains on general self-concept did not differ in the manner suggested by their hypothesis. As a solution, Marsh suggests the use of standardized scores which would reflect the valence of the domain-specific self-concept ratings more accurately. Along the same lines, Marsh (1986) pointed out that the nature of the raw importance ratings used in Hoge and McCarthy's study may have inhibited the meaningfulness of these ratings across domains. Instead, he suggests the use of "proportionalized importance ratings" that may be obtained by dividing each raw rating by the sum of the ratings at either the individual or the group level. Marsh (1986) proposed that the use of these types of transformed scores would minimize the effect of idiosyncratic rating patterns.

Marsh's Reconciliation

Marsh (1986) soon followed-up his own suggestions. In his own attempt to determine the relevance of domain importance to general self-esteem, Marsh (1986) drew samples from five groups of high-school-age students likely to rate the importance of various domains differently because of their involvement or non-involvement in various activities or programs.

Participants were administered the Self-Description Questionnaire-III (SDQ-III; Marsh, 1989a) plus a set of twelve summary statements that each student rated on a scale from one to eight, first in terms of personal accuracy, then in terms of personal importance. Accuracy judgments were obtained via these summary statements to compare the multi-item scales for each domain with its single-item parallel (correlations between the two ranged from .49 to .87).

Participants in two samples, an Outward Bound group and a group of female athletes, were expected to have higher physical ability self-concepts on average than members of the other groups; another sample, composed of Catholic high school students, was expected to have a higher average spiritual/religious self-concept score than the other groups. Individuals in these groups were also expected to rate these respective areas as more important than individuals in the other groups would. These predictions were supported; both self-concept scores and importance ratings were significantly higher in these domains for these groups (Marsh, 1986).

Marsh (1986) first tested a hypothesis related to Harter's (1982, 1983, 1986) discrepancy model. According to this model, the difference between perceived domain importance and domain self-concept is the key to predicting general self-esteem. This model predicts that, as the size of the discrepancy between domain importance ratings and domain self-perception ratings increases, general self-esteem decreases. Marsh (1986) concluded that this model was not supported because the correlations between the discrepancy scores and general self-esteem were lower in magnitude than

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those based on raw self-concept scores for all domains and lower than or about equal to those based on self-concept/importance products. In addition, these correlations did not tend to be negative as the model would predict.

To test the interactive hypothesis, Marsh (1986) calculated two versions of the importance ratings and three versions of the self-concept scores before he combined them and related the products to general self-esteem. First, he transformed the domain-specific self-concept scores into z-scores. Next, he calculated proportionalized importance ratings at the total group, subgroup, and individual levels to test Hoge and McCarthy's (1984) conclusion that the value of a domain is determined at the group rather than the individual level. At the group level, importance ratings were proportionalized by dividing the average importance rating for each domain by the sum of the average importance ratings across domains. Thus, within each domain, all subjects were assigned the same domain importance value. Subgroup calculations were carried out in the same way, using subgroup data to proportionalize the importance ratings for all subgroup members. Finally, at the individual level, each importance rating was divided by the sum of all individual importance ratings.

Marsh found that no form or combination of the importance ratings was useful for explaining a significant degree of variance in self-esteem scores over and above that explained by domain-specific self-concept scores alone. However, all combinations of domain-specific self-concept scores and domain importance ratings were found to be much more strongly correlated with general self-esteem than was the case in the Hoge and McCarthy (1984) study. In addition, individually-weighted importance ratings were not related to general self-esteem to a lesser degree than group- or subgroup-weighted ratings.

Marsh (1986) further tested the interactive model through the use of a series of hierarchical multiple regression equations with general self-esteem as the dependent variable. In separate equations for each facet of self-concept, he entered the self-concept term first, the importance rating term second, and the interaction term third. For almost every dimension, self-concept terms were significant. The two exceptions were for the physical abilities and spiritual domains. Importance main effects were significant ($p < .05$) only in physical abilities, physical appearance, spiritual, and problem solving domains. The interaction effects were significant for only the physical abilities, emotional stability, and spiritual domains.

In one final hierarchical multiple regression equation, Marsh (1986) entered all twelve self-concept terms first, then the twelve importance ratings, and finally the twelve interaction terms. The self-concept variables alone accounted for 60.4% of the variance in general self-concept. The importance terms added 1.3% and the interaction terms another 1.8%.

In general, Marsh (1986) rejected the discrepancy hypothesis and found little support for the weighting of self-concept scale scores by importance

ratings. Two exceptions to the general trend, however, provide clues for further investigation of the interaction hypothesis. In the physical ability and spirituality domains, in which importance was expected to have the greatest influence due to the make-up of the samples used in this study, the interaction terms were statistically significant while the self-concept terms were not. This suggests that importance may be shown to have some influence on general self-esteem, provided that the domains sampled vary in group importance and the individuals sampled vary in their involvement in these domains.

Questions Left Unanswered

Even though he did not unearth strong evidence for the relevance of importance ratings to general self-concept, Marsh (1986) did not reject the still "intuitively plausible" (p. 1233) interaction hypothesis in principle. Rather, he suggested the need for further investigation of this issue in three specific ways. First, to compare the relative meaningfulness of importance ratings across both individuals and domains, one must elicit information about a wider range of domains than is available from the SDQ-III. Domains of non-universal importance should be included to enhance the degree of variability in the importance ratings both across individuals and across domains. Secondly, diverse groups of individuals should be sampled for the same sorts of reasons. Third, because of the psychometric weaknesses displayed by the importance ratings, Marsh (1986) suggested the development of alternative forms of importance ratings scales. A fourth alternative, which is also related to the psychometric weaknesses displayed by the importance ratings, but was not mentioned by Marsh (1986), involves the development of multi-item scales to assess domain importance. The present study was designed to further explore the interaction hypothesis by addressing each of these four issues.

Increasing Domain Variability

Each of the domains assessed by the SDQ-III has rather universal relevance; that is, each of us probably has self-concepts related to our verbal competence, our emotional stability, physical appearance, honesty, etc. Although these domains may vary somewhat in their personal importance, this variation is not likely to be very significant on average. Non-universal domains, such as visual arts, dance, drama, and music, however, are more likely to vary in their personal importance across individuals. To some people, these areas are of utmost importance, to others, very little. Therefore, these are the types of domains that are sampled in the present study to increase the variability of domain importance ratings.

Vispoel (1993a) developed the Arts Self-Perception Inventory (ASPI) to assess self-perception in visual arts, dance, drama, and music, and demonstrated that self-perceptions in these domains constitute distinct facets

of self-concept, differing from one another and from the facets of self-perception assessed by the SDQ instruments. In addition, he found that self-perception in each of these domains is significantly related to corresponding ratings of interest, ability, and achievement. The effects of the importance of these domains on general self-esteem have not been explored.

Increasing Participant Variability

For the same reasons that make the inclusion of non-universal domains advisable, the inclusion of individuals who are involved in these domains to varying degrees would also seem wise. If none of the participants in a study are involved in music, the personal importance of music will probably appear to be low and relatively non-variable; music would be unlikely to appear relevant to self-concept. However, if participants vary in the degree to which they are involved in music, then an indication of the personal importance of music may be found to mediate the contribution of music self-concept to general self-esteem. Therefore, all students from one grade of a school were selected to participate in this study to take advantage of natural variation of involvement in several activities.

Using Multi-Item Subscales to Assess Importance

The use of single-item subscales to assess domain-specific self-concept has been criticized because of the typically poor psychometric properties of these scales (Marsh, 1986; Marsh, Parker, & Barnes, 1985). However, both Hoge and McCarthy (1984) and Marsh (1986) used single-item ratings scales to assess domain importance. It is highly likely that the development and use of multi-item subscales to assess domain importance will improve the reliability of importance ratings, and this improvement may result in the emergence of stronger relations between domain importance and both general self-esteem and domain-specific self-concepts. Three-item subscales were used to assess domain importance in the present study.

Alternative Methods of Assessing Importance

Marsh (1986) suggested the development and use of alternative methods of assessing importance. Although he gave no explicit guidelines for such instruments, he provides a clue for one route to take. Because he selected several groups of individuals for his study (Marsh, 1986) based on their involvement or non-involvement in particular domains, he implied that one's involvement in an domain should be related to the value one places on that domain. Thus, an alternative form of importance ratings could be related to an individual's level of involvement in particular domain of activities.

A separate, more theoretical basis on which to develop an importance instrument is related to the distinction between the committed ideal and the fantasy ideal self (Rosenberg, 1979). If importance information is to be

grounded in actual patterns of involvement, it must not be obtained in a way that appears as a "wish list" (Harter, 1986). Instead, typicality must be both implicit and explicit in a scale of this sort so that students and researchers will be less likely to confuse the meaning of personal indications of the value and importance of particular activities.

As an example, consider a student, John, who is a dancer. If John were asked simply to rate the importance of dance on a scale from one (not important) to six (very important), he might make his rating in any of a number of ways. For example, he might compare one domain to another, or one domain across time, or himself in a domain to others in that domain, etc.. Clearly, when assessing importance via absolute ratings such as those used by Marsh (1986) and Hoge and McCarthy (1984), researchers have no way of determining the nature of the comparisons individuals make when they rate domain importance.

On the other hand, if students are asked to think about their real involvement in certain activities and if and how they would like to change that level of involvement, their responses to both of these prompts might reflect more meaningful information than abstract ratings of importance do. With a format grounded in individual comparisons between actual and intended commitments, students and researchers will be less likely to confuse the meaning of personal indications of the value and importance of listed activities. Therefore, in the present study, importance was assessed via the traditional rating method, by ratings of real involvement in activities related to the domains, and by ratings of ideal involvement in domain-related activities.

By addessing the four methodolical issues outlined above, the present study seeks answers to three substantive questions. First, what are the relations between domain-specific self-concepts and general self-esteem? Second, do the relations between domain-specific self-concepts and general self-esteem depend on domain importance? Third, do the relations between domain-specific self-concepts and general self-esteem depend on how domain importance is assessed?

Method

Participants and Procedures.

All 189 sixth grade students at a middle school in a small midwestern city were given the opportunity to participate in this study. One hundred and sixty-eight took part. Average age of the participants was 11.99 and 48% were female. This sample was 85% Caucasian, 6% Native-American, 3% African-American, 3% Mexican-American, 2% of other Hispanic ancestry, and 2% Asian. Forty-eight percent of the students came from homes in which at least one parent had a college degree. Participants completed the questionnaires during a regularly scheduled guidance class.

Instruments

Self-Concept Instruments. Because the SDQ instruments are based on a coherent theoretical model of self-concept, their use allows the testing of both the internal and external connections of the self-concept nomological network (Byrne, 1984). Therefore, the SDQ-II was chosen to evaluate the internal links between general self-esteem, domain-specific self-concepts, and domain importance from the perspective of the hierarchical model of self-concept.

The Self-Description Questionnaire-II (SDQ-II; Marsh, 1990a), a 102-item, multi-domain self-concept instrument designed for use with adolescents, was administered first. This instrument assesses self-perceptions in general school, math, verbal, physical abilities, physical appearance, emotional stability, same sex relations, opposite sex relations, parent relations, and honesty-trustworthiness domains; a General Self-Esteem scale is included as well. Alpha-reliability estimates reported in the test manual range from .83 for the Emotional Stability subscale to .94 for the Physical Appearance and General Self-Esteem subscales (see Marsh, 1990a for additional information in support of the validity of this instrument).

To assess self-concepts in the artistic domains, the adolescent form of the Arts Self-Perception Inventory (ASPI; Vispoel, 1993a; Vispoel, Wang, Bleiler, & Tzou; 1993) was administered next. The ASPI is an 40-item instrument that taps self-concept in art, music, dance, and drama. Alpha coefficients of .92 for each 14-item subscale have been demonstrated (see Vispoel, 1993a for additional information in support of the validity of this instrument).

Importance Instruments. Two instruments were administered to assess domain importance. First, a 42-item scale was developed based on the importance scale used in the Marsh (1986) study. Each of the domains included on the SDQ-II and the ASPI were represented by three items that participants were instructed to rate according to the following instructions: "How important is each of the characteristics below in determining how you feel about yourself in general?" Rating was done on a scale from one (Not Important) to six (Very Important) to correspond with the rating scales used in both the SDQ-II and the ASPI.

The second importance measure was designed to elicit information related to participants' actual and desired involvement in and commitment to the 14 domains assessed by the self-concept instruments. Two sets of responses were obtained for each item stem. First, individuals responded to the prompt, "How much time do you currently spend on the activity?" The second prompt was, "How much time would you like to spend on the activity if given the chance?" Both sets of responses were made on a scale from one (None) to six (A Lot). Three items per domain for each prompt were included.

Demographic Instrument. A short demographic questionnaire elicited information about individuals' recent grades in language arts, math, physical education, dance, music, art, and drama, as well as information regarding participants' age, gender, grade level, ethnicity, parents' educational backgrounds. Twenty-nine additional questions were related to curricular and extra-curricular experience in music, art, dance, and drama.

Results

Descriptive Statistics

Central Tendency, Variability, and Reliability

Means, standard deviations, and alpha reliability coefficients for the responses to the general self-esteem scale, the fourteen domain-specific self-concept scales, and the three types of domain-specific importance ratings are presented in Table 1. Consistent with previous findings (Harter, 1985; Hoge & McCarthy, 1984; Marsh, 1986), importance ratings tended to be higher on average than self-concept scores in corresponding domains. For the music, dance, and drama domains, however, traditional ratings were somewhat lowe than the corresponding self-concept ratings.

Alpha coefficients for the self-concept scales ranged from .76 (same sex relations) to .92 (visual art and dance) with a median of .85 and a mean of .86. These reliability estimates are comparable to those cited in the literature for these instruments (Marsh, 1985; Vispoel, 1993a). Reliability estimates for the traditional importance ratings ranged from .71 (emotional stability) to .87 (verbal and visual art) with a median of .85 and a mean of .83. Marsh (1986) reported test-retest reliabilities for the importance subscales that ranged from .46 for the verbal domain to .84 for the spiritual domain (mdn=.57, M=.58). Because single-item subscales were used to assess importance in the Marsh (1986) study, coefficient alpha estimates were not generated.

Alpha coefficients for the real involvement ratings ranged from .76 for the parent relations scale to .94 for the dance scale; the median alpha was .87 and the mean was .86. For the ideal involvement ratings, reliability estimates ranged from .75 for the honesty-trustworthiness scale to .93 for the drama scale with a median of .89 and a mean of .87.

Table 1.

Means, Standard Deviations, and Alpha Reliability Coefficients for Self-Concept Scores and Traditional, Real, and Ideal Importance Ratings.

Domain	SC		Traditional		Real		Ideal	
	Mean (SD)	Alpha	Mean (SD)	Alpha	Mean (SD)	Alpha	Mean (SD)	Alpha
General Self	4.76 (.68)	.79						
General School	4.50 (.80)	.89	5.07 (1.12)	.84	5.19 (.91)	.85	5.39 (.92)	.84
Mathematical	4.20 (.97)	.91	4.92 (1.10)	.86	5.05 (.94)	.86	5.27 (.99)	.88
Verbal	4.17 (.86)	.82	4.59 (1.20)	.87	4.55 (1.05)	.80	4.79 (1.15)	.85
Physical Ability	4.62 (.81)	.81	4.84 (1.19)	.85	5.44 (.76)	.88	5.38 (.91)	.85
Physical Appearance	4.03 (.84)	.90	4.48 (1.20)	.82	4.87 (.87)	.76	5.21 (.96)	.92
Honesty-Trustworthiness	4.43 (.65)	.95	4.99 (1.13)	.84	5.06 (.78)	.78	5.34 (.85)	.75
Emotional Stability	3.76 (.74)	.85	4.47 (1.03)	.71	4.79 (.93)	.82	5.26 (.90)	.88
Parent Relations	4.61 (.73)	.78	5.22 (1.09)	.80	5.49 (.78)	.87	5.48 (.90)	.90
Same Sex Relations	4.64 (.67)	.76	4.95 (1.04)	.81	5.32 (.88)	.85	5.09 (1.17)	.89
Opposite Sex Relations	3.87 (.91)	.83	4.71 (1.18)	.85	4.78 (1.03)	.87	5.20 (1.07)	.89
Music	4.04 (.98)	.91	3.93 (1.38)	.86	4.26 (1.36)	.92	4.45 (1.47)	.92
Art	3.98 (1.01)	.92	4.16 (1.29)	.87	4.43 (1.19)	.88	4.78 (1.26)	.90
Dance	3.57 (1.04)	.92	3.25 (1.56)	.82	3.51 (1.50)	.94	3.76 (1.57)	.92
Drama	3.62 (1.01)	.91	3.48 (1.43)	.85	3.61 (1.45)	.92	4.01 (1.56)	.93

Relations between Domain-Specific Self-Concepts and General Self-Esteem

General self-esteem was significantly correlated with each of the ten domain-specific self-concept scores assessed by the SDQ-II and with art self-concept at the $p < .001$ level (Table 2). The relations between general self-esteem and music and dance were significant at the $p < .01$ level, and the same relation for drama was significant at the $p < .05$ level. General self-esteem was most strongly related to general school self-concept ($r = .69$), followed by physical appearance ($r = .57$) and verbal self-concept ($r = .53$).

The Role of Domain Importance

Three sets of analyses were conducted to address the question of whether the relations between domain-specific self-concepts and general self-esteem depend on domain-specific importance. These analyses were based on those conducted by Marsh (1986) in his investigation of the role of importance.

Self-Concept by Importance Products

First, self-concept scores and importance ratings were combined in one of two ways before being related to general self-esteem at the domain level (Table 2). For each type of importance rating, a product was calculated at the domain level using corresponding self-concept scores and importance ratings. The second, third, and fourth columns in Table 2 show that the correlations between general self-esteem and domain-level products follow the same general pattern for each type of importance rating. With the exception of the dance and drama domains, these correlations tended to be highly significant ($p < .001$), although the magnitude for the opposite-sex relations, music, and art domains were smaller than for the other domains. The sums of each type of product were strongly related to general self-esteem ($p < .001$).

None of the relations between general self-esteem and domain-level products involving the traditional importance ratings was significantly different from the relations between general self-esteem and domain-specific self-concepts alone. With the exception of the general school domain, the same held true for the products involving the real and ideal involvement ratings. However, the correlations between general self-esteem and the sums of each of these products across domains were significantly smaller than the correlation between general self-esteem and the sum of the self-concept scores alone.

Table 2.

Correlations between General Self-Esteem and Domain-Specific Self-Concept by Importance Products.

	Products				Comparisons across Ratings					
	SC	T	R	I	S:T	S:R	S:I	T:R	T:I	R:I
GS	.69[c]	.64[c]	.58[c]	.53[c]		c	c		b	
M	.41[c]	.52[c]	.37[c]	.35[c]				c	c	
VB	.53[c]	.51[c]	.41[c]	.39[c]					b	
PH	.35[c]	.42[c]	.38[c]	.33[c]						
PA	.57[c]	.43[c]	.45[c]	.45[c]						
HT	.32[c]	.35[c]	.32[c]	.32[c]						
ES	.33[c]	.40[c]	.33[c]	.33[c]						
PR	.46[c]	.43[c]	.41[c]	.37[c]						
SS	.50[c]	.52[c]	.39[c]	.34[c]				c	c	
OS	.29[c]	.30[c]	.22[b]	.20[a]					b	
MS	.22[b]	.25[c]	.16[a]	.16[a]				b	b	
AR	.29[c]	.35[c]	.23[b]	.24[b]				c	b	
DA	.22[b]	.10	.07	.09						
DR	.19[a]	.14	.13	.15						
Sum	.66[c]	.59[c]	.50[c]	.46[c]	b	c	c	b	c	

Note [a]p < .05, [b]p < .01, [c]p < .001. Columns five through ten relate to the results of dependent sample t-tests. That is, in the S:T column, the correlations between General Self-Esteem and Self-Concept are compared to the correlations between General Self-Esteem and Traditional Ratings.

SC = Domain Self-Concept score
R = Real Importance
S:T = Self-Concept v. Traditional
S:I = Self-Concept v. Ideal
T:I = Traditional v. Ideal
GS = General School
M = Math
VB = Verbal
PH = Physical Abilities
PA = Physical Appearance
DA = Dance
ES = Emotional Stability
T = Traditional Importance
I = Ideal Importance
S:R = Self-Concept v. Real
T:R = Traditional v. Real
R:I = Real v. Ideal
PR = Parent Relations
SS = Same Sex Relations
OS = Opposite Sex Relations
MS = Music
AR = Art
DR = Drama
HT = Honesty-Trustworthiness

Raw, Standardized, and Proportionalized Scores

The second set of analyses that related to the effects of domain importance on the relations between domain-specific self-concepts and general self-esteem involved the transformation and combination of self-concept scores and importance ratings at either the individual or the group level (Table 3). First, raw domain-specific self-concept scores were summed and correlated with general self-esteem as discussed in the previous section. Next, domain-specific self-concept scores were standardized at the group level, then summed and correlated with general self-esteem. The correlations for these totals were very similar (r=.66 and .68, respectively; p <.001). The multiple R, obtained via a multiple regression equation for which general self-esteem was the dependent variable and all of the self-concept scores were entered as a block, was .80, and represents an upper limit for the relations between self-concept scores and general self-esteem. The R corrected for shrinkage was .61 (Cohen & Cohen, 1983)[1].

To create variables at the group (total sample) level, group mean importance ratings were multiplied at the domain level by either raw or standardized self-concept scores. In other words, within each domain, the same importance value was used for all cases, and was combined with either the raw self-concept score or a standardized self-concept score. These domain-level products were then summed, and the total was correlated with general self-esteem. Correlations were practically identical for the totals based on raw and standardized self-concept scores (r=.68 and .69, respectively), and were identical across types of importance rating. All correlations were significant at the p <.001 level.

Four types of self-concept and importance combinations for each type of importance rating were calculated at the individual level. First, raw self-concept scores andcorresponding raw importance ratings were multiplied at the case level foreach domain and then summed and correlated with general self-esteem (this formula is identical to the one used to calculate the correlations that appear at the bottom of the "products" columns in Table 2). This process was then repeated using standardized self-concept scores.

The third and fourth types of weighting combinations also involved the raw and standardized self-concept scores, but substituted proportionalized importance ratings for the raw ratings used previously. Proportionalized importance ratings were calculated by dividing each domain-specific importance rating by the sum of all of the importance ratings of that type. Correlations between the resulting totals of each of these four weighting combinations were all significant at the p <.001 level (Table 3). Correlations for weighting combinations based on individual ratings were similar to those based on group ratings and similar across rating types with one set of exceptions. As expected, results of dependent sample t-tests indicated that the correlations for weighting combinations based on raw self-concept scores and raw importance ratings at the individual level were significantly smaller in

Table 3.

Correlations between General Self-Esteem and Summed Combinations of Domain-Specific Self-Concept Scores and Domain-Specific Importance Ratings.

Score Type	Self-Concept	Trad	Real	Ideal
Total raw score	.66[c]			
Total standard score	.68[c]			
Multiple R	.80[c]			
R corrected for shrinkage	.78[c]			
	Weightings based on Group Ratings			
Raw SC X Raw Importance		.68[c]	.68[c]	.68[c]
Standardized SC X Raw Importance		.69[c]	.69[c]	.69[c]
	Weightings based on Individual Ratings			
Raw SC X Raw Importance		.59[c]	.50[c]	.46[c]
Standardized SC X Raw Importance		.66[c]	.69[c]	.68[c]
Raw SC X Prop. Importance		.69[c]	.70[c]	.69[c]
Standardized SC X Prop. Importance		.69[c]	.70[c]	.69[c]

Note. [c]p < .001 SC = Self-Concept Prop = Proportionalized Importance Ratings

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magnitude than any of the other combinations across rating type ($p < .05$ for the traditional ratings; $p < .01$ for the real and ideal ratings).

Hierarchical Multiple Regression Analyses

A series of 45 hierarchical multiple regression equations was used to explore further the effects of domain importance on the relations between domain-specific self-concepts and general self-esteem. Fifteen equations were produced for each type of importance rating, one for each of the domains and one in which all domain self-concept scores and all (of one type per equation) importance ratings were included. For each equation, general self-esteem was the dependent variable, and the self-concept term was entered first, the importance term second, and the interaction term third.

Results of these analyses, including final R^2 as well as part correlations and changes in R^2 for each step, are presented in Table 4. All self-concept main effects were significant at the $p < .001$ level, with the exception of music, dance, and drama. The dance self-concept term was significant at the $p < .01$ level and the music and drama self-concept terms at the $p < .05$ level.

Traditionally-rated importance main effects were significant at or beyond the $p < .05$ level for general school, math, physical abilities, honesty-trustworthiness, emotional stability, same-sex relations, and art. Main effects for the real involvement ratings were significant for dance. Emotional stability was the only domain for which the main effects for an ideal involvement rating term was significant.

Among the interaction terms, which provide the most relevant indication of the mediating role of importance (Marsh, 1986), a significant effect emerged in the physical abilities ($p < .05$) and emotional stability domains ($p < .1$) for the traditional importance ratings. Real involvement ratings produced significant interaction effects in the general school, physical abilities, physical appearance, music, and art domains ($p < .05$ for music; $p < .1$for others). Interaction terms for the ideal ratings were significant for the math and music domains ($p < .1$).

The most significant interaction results emerged for the physical abilities and music domains and these patterns are depicted in Figures 1 and 2. Regression lines plotted in Figure 1 represents the relations between physical abilities self-concept and general self-esteem at varying levels of importance (percentile ranks of 1, 25, 50, 75, and 99). As illustrated in Figure 1, the relations between self-concept and self-esteem differed across levels of importance in the manner suggested by the interaction hypothesis (Hoge & McCarthy, 1984; Marsh, 1986). That is, when physical abilities importance was extremely low, physical abilities self-concept and general self-esteem were essentially uncorrelated. However, as importance moved from moderate to extremely high, the relation between physical abilities self-concept and general self-esteem became increasingly stronger.

Table 4

Multiple Regression of Self-Concept, Importance, and the Self-Concept by Importance Interaction on General Self-Esteem.

	Type	Self-Concept part r	Self-Concept R^2 Change	Importance part r	Importance R^2 Change	Interaction part r	Interaction R^2 Change	Final R^2
GS	Trad	.686[d]	.471[d]	.142[b]	.020[b]	.060	.004	.494[d]
	Real			-.003	.000	.101[a]	.010[a]	.481[d]
	Ideal			.007	.000	.054	.003	.473[d]
M	Trad	.414[d]	.171[d]	.155[b]	.024[b]	.082	.007	.202[d]
	Real			.008	.000	-.002	.000	.171[d]
	Ideal			.057	.003	-.123[a]	.015[a]	.189[d]
VB	Trad	.525[d]	.276[d]	.124	.015	.057	.003	.294[d]
	Real			.029	.001	.011	.000	.277[d]
	Ideal			.040	.002	-.031	.001	.278[d]
PH	Trad	.346[d]	.120[d]	.203[c]	.041[c]	.143[b]	.020[b]	.182[d]
	Real			.134	.018	.135[a]	.018[a]	.140[d]
	Ideal			.054	.003	.110	.012	.135[d]
PA	Trad	.569[d]	.324[d]	.043	.002	.007	.000	.326[d]
	Real			-.014	.000	.117[a]	.014[a]	.338[d]
	Ideal			.058	.003	-.012	.000	.327[d]
HT	Trad	.316[d]	.100[d]	.172	.030	-.019	.000	.130[d]
	Real			.110	.012	.050	.002	.115[d]
	Ideal			.135	.018	-.065	.004	.122[d]
ES	Trad	.332[d]	.110[d]	.203[c]	.041[c]	.126[a]	.016[a]	.167[d]
	Real			.114	.013	.096	.009	.132[d]
	Ideal			.145[b]	.021[b]	-.083	.007	.138[d]
PR	Trad	.456[d]	.208[d]	.133	.018	-.032	.001	.227[d]
	Real			.055	.003	-.048	.002	.213[d]
	Ideal			.050	.002	-.073	.005	.216[d]

Note. [a]p < .1; [b]p < .05; [c]p < .01; [d]p < .001; df=164

GS = General School M = Math PA = Physical Appearance
PR = Parent Relations VB = Verbal HT = Honesty-Trustworthiness
ES = Emotional Stability PH = Physical Abilities

Table 4 continued.

	Type	Self-Concept part r	Self-Concept R^2 Change	Importance part r	Importance R^2 Change	Interaction part r	Interaction R^2 Change	Final R^2
SS	Trad	.499[d]	.249[d]	.239[d]	.057[d]	-.058	.003	.309[d]
	Real			-.007	.000	.024	.001	.249[d]
	Ideal			.037	.001	-.033	.001	.251[d]
OS	Trad	.286[d]	.082[d]	.112	.012	.067	.005	.098[d]
	Real			-.043	.002	.064	.004	.088[c]
	Ideal			-.037	.001	-.001	.000	.083[c]
MS	Trad	.219[b]	.048[b]	.112	.012	.067	.004	.065[b]
	Real			-.083	.007	.145[b]	.021[b]	.076[c]
	Ideal			-.075	.006	.138[a]	.019[a]	.073[c]
AR	Trad	.287[d]	.082[d]	.199[c]	.039[c]	.059	.004	.125[d]
	Real			-.050	.002	.124[a]	.015[a]	.100[d]
	Ideal			-.020	.000	.097	.009	.092[c]
DA	Trad	.217[c]	.047[c]	-.139	.019	.073	.005	.072[c]
	Real			-.182[b]	.033[b]	.001	.000	.080[c]
	Ideal			-.146	.021	.059	.004	.072[c]
DR	Trad	.187[b]	.035[b]	-.030	.001	-.005	.000	.036
	Real			-.066	.004	.059	.003	.043[a]
	Ideal			-.010	.000	.044	.002	.037
tot	Trad		.643[d]		.046		.045	.733[d]
	Real				.025		.040	.708[d]
	Ideal				.029		.045	.717[d]

Note. [a]p < .1; [b]p < .05; [c]p < .01; [d]p < .001;

df=164 for single domains; df=125 for total equation

SS = Same Sex Relations MS = Music OS = Opposite Sex Relations
AR = Art DA = Dance DR = Drama
tot = All domains

Figure 2 illustrates the relations between music self-concept and general self-esteem at varying levels of involvement in music related activities (percentile ranks of 1, 25, 50, 75, and 99). As was the case for importance in the physical abilities domain, general self-esteem and self-concept were basically unrelated when involvement in music was low. As involvement increased beyond the moderate level, however, the correlation general self-esteem and self-concept became increasingly stronger. Once again, this effect appears to support the interaction hypothesis.

The patterns of the other significant interactions (in the general school, physical appearance, emotional stability, and visual art domains) were similar to those for the physical abilities and music domains. The only exception to this pattern emerged for ideal involvement in the math domain. As

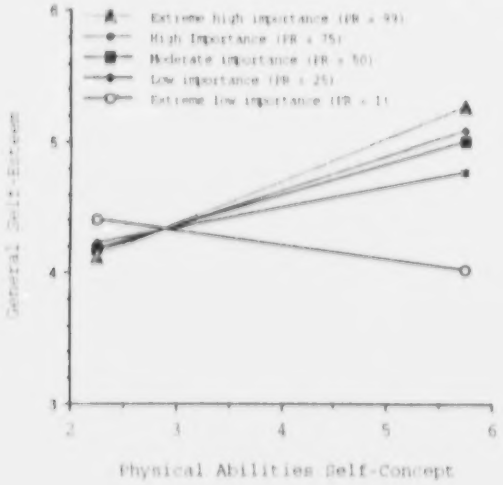
Extreme high importance (PR = 99)
High Importance (PR = 75)
Moderate importance (PR = 50)
Low importance (PR = 25)
Extreme low importance (PR = 1)
General Self-Esteem
Physical Abilities Self-Concept

Figure 1. Relations between Physical Abilities Self-Concept and General Self-Esteem at Various Levels of Physical Abilities Importance.

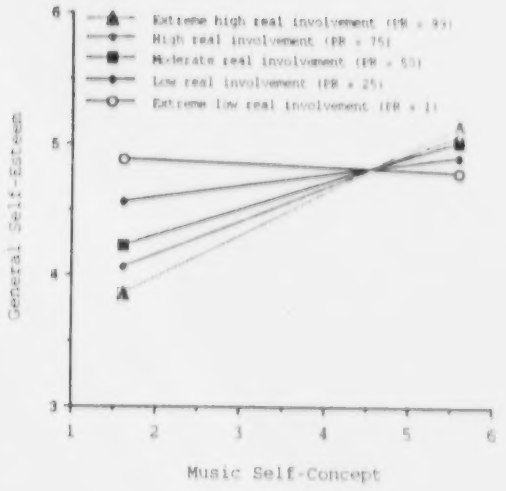
Extreme high real involvement (PR = 99)
High real involvement (PR = 75)
Moderate real involvement (PR = 50)
Low real involvement (PR = 25)
Extreme low real involvement (PR = 1)
General Self-Esteem
Music Self-Concept

Figure 2. Relations between Music Self-Concept and General Self-Esteem at Various Levels of Real Music Involvement.

illustrated in Figure 3, general self-esteem and self-concept became more strongly related as ideal involvement in math decreased. Although this result could be due to sampling error, it also may indicate that importance mediates the relations between domain self-concepts and general self-esteem in unusual ways in some content domains.

Alternative Methods of Assessing Domain Importance

Self Concept by Importance Rating Products

Among the domain-level self-concept by importance products (Table 2), the relations between general self-esteem and the traditional ratings were stronger than those for the real ratings in the math ($p < .01$), same sex relations ($p < .01$), music, and art ($p < .01$) domains. In addition, these relations

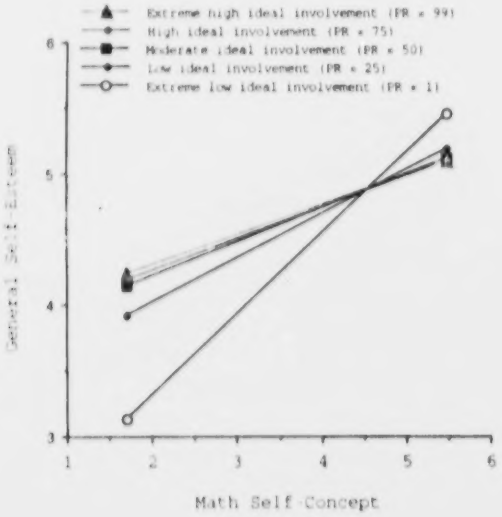

Figure 3. Relations between Math Self-Concept and General Self-Esteem at Various Levels of Ideal Math Involvement.

were stronger than those for the ideal ratings in the general school, math ($p < .01$), verbal, same sex relations ($p < .01$), opposite sex relations, music, and art domains. The relations for the real and ideal ratings did not differ significantly.

Summed Combinations of Self-Concept by Importance Rating Products

Among the relations between general self-esteem and the eighteen summed combinations of domain self-concept by importance products (Table 3), the raw self-concept by raw importance combination involving the traditional importance ratings was more strongly related to general self-esteem than were the combinations involving the real or ideal ratings ($p < .05$, $p < .01$, respectively). The relations for the combinations involving the real and ideal ratings did not differ significantly. None of the other combinations differed across type of importance rating.

Hierarchical Multiple Regression Results

Finally, the pattern of results for the interaction terms in the regression equations (Table 4) indicate that the traditional, real, and ideal ratings differ in their effects on the relations between domain-specific self-concepts and general self-esteem. Interaction terms for the real and/or ideal ratings were significant in the physical abilities, music, and art domains, but not in the dance and drama domains as expected. The traditional ratings also produced significant interactions in the physical abilities domain and, contrary to expectations, in the emotional stability domain.

Summary

Self-concept in all domains was related to general self-esteem; importance was generally related to appropriate facets of self-concept and to general self-esteem. Support for the interaction hypothesis emerged in several domains from the results of the hierarchical multiple regression analyses. That is, the relations between self-concept in some domains and general self-esteem appear to depend on how important the domain is to the individual and on how importance is assessed.

Discussion

The purpose of this study was to explore the effects of domain importance on the relations between domain-specific self-concepts and general self-esteem. Specifically, three questions were under investigation. First, what are the relations between domain-specific self-concepts and general self-esteem? Second, do the relations between domain-specific self-concepts and general self-esteem depend on domain importance? Third, do the relations between general self-esteem and domain-specific self-concepts depend on how domain importance is assessed? Interpretation of the results pertaining to each of these questions will be presented in turn.

Relations between Domain-Specific Self-Concepts and General Self-Esteem

Domain-specific self-concepts were related to general self-esteem in a pattern similar to patterns reported elsewhere (Harter, 1985; Marsh, 1990b; Vispoel, 1993a). General self-esteem was most highly related to general school self-concept and least strongly, though still significantly, related to drama self-concept.

The strong relation between general self-esteem and general school self-concept may be related in part to the level of abstraction required in the responses to the items that make up the subscale that tap each of these domains. For example, items on the General Self-Esteem subscale usually contain the phrase, "in general" or "most things I do" or "nothing I do". Items on the General School subscale usually include the phrase "most school subjects". Such phrasing may make it difficult for students to separate these two facets distinctly. On the other hand, school is such a significant part of these individuals' lives that this relation may be an accurate reflection of the connection between these two facets of self-perception. Although they did not assess general school self-concept directly, Eccles and her colleagues (Eccles, Wigfield, Flanagan, Miller, Reuman, & Yee, 1989; Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991) found that general self-esteem was related to, and perhaps affected by, the transition from elementary to junior high school. This suggests that general self-esteem and school-related self-perceptions are indeed strongly linked.

Contrary to Vispoel's (1993a) findings, visual art self-concept was significantly related to general self-esteem; in fact, art was more strongly related to general self-esteem than any of the other arts areas. It is unclear whether the relation between general self-esteem and art self-concept was unusual in this study. This relation did not emerge in the Vispoel (1993a) study. The discrepancy between these sets of findings may be linked to particular school or community circumstances or to specific teachers. That is, the more strongly art is emphasized in the curriculum, the more strongly it may be linked to general self-esteem. In addition, students in the Vispoel (1993a) study had not yet taken an art class in school; students in the present study had taken an art course during the year in which they were surveyed. Further research is needed to determine whether art self-concept is generally related to general self-esteem.

Finally, the relation between physical appearance self-concept and general self-esteem was similar to that reported by Harter (1985) for individuals of about the same age.

Relations between Domain-Specific Self-Concepts and General Self-Esteem across Domain-Specific Importance Ratings

Three sets of analyses pertain to the effects of domain importance on the relations between domain-specific self-concepts and general self-esteem. Each of these sets involved the relation of combinations of self-concept scores and importance ratings to general self-esteem.

First, the correlations between general self-esteem and the simple sum of the raw self-concept scores ($r = .66$; $p < .001$) and between general self-esteem and the domain level self-concept scores were compared with the correlation between general self-esteem and the domain level products of self-concept and importance. A comparison of these correlations with the zero-order correlations between self-concept scores and general self-esteem reveals that, on the whole, general self-esteem was as strongly related to self-concept scores weighted by importance ratings at the domain level as it was to domain-specific self-concept scores alone. However, the sums of the raw self-concept by raw importance products were not as strongly related to general self-esteem as the sum of the self-concept terms alone.

In the second set of analyses, the self-concept scores and/or the importance ratings were transformed before being combined. Although the magnitude of the correlations between general self-esteem and the raw score combinations was significantly smaller than that for any of the other combinations, it does not appear from these analyses that any of the other combinations differed from the others or from the simple sum of the unweighted self-concept scores in a meaningful way.

Finally, the results of the hierarchical multiple regression analyses suggest that the relations between self-concepts and general self-esteem vary across across levels of importance in some domains depending on which type of importance ratings are used. In seven of the fourteen domains, importance and self-concept interacted in the prediction of general self-esteem. In most of these domains (five of the seven), these interactions emerged only when the real or ideal ratings were used. In the music domain, both the real and ideal ratings resulted in significant interactions suggesting that the relation of of domain-specific self-concept to general self-esteem depends on how involved a student is in music-related activities and how much a student would like to be involved in these activities. The effect of physical abilities self-concept on general self-esteem depended on how important physical activities were and on how involved the student was in these activities. Thus, it appears that the relations between self-concept and general self-esteem do depend on importance or involvement in some domains.

Despite the statistical significance of the interaction terms, it should be noted that even the two most highly significant interaction terms only accounted for about two percent of the variance in general self-esteem (after

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the main effects of self-concept and importance had been accounted for). Therefore, although these findings provide stronger evidence for the role of importance than had been reported previously, their practical significance is unclear.

Relations between Domain-Specific Self-Concepts and General Self-Esteem and Methods of Domain Importance Assessment

As indicated in the previous section, the patterns of results for the hierarchical multiple regression analyses indicate that the relations between domain-specific self-concepts and general self-esteem depend upon how importance is assessed as well as on the domain considered. In general, the real and ideal involvement ratings resulted in a greater number of significant interactions ($p < .1$) than did the traditional importance ratings. Thus, the use of these scales has resulted in the strongest evidence to date in support of the possible mediating role of domain importance.

Although the lack of significant correlations between these ratings and general self-esteem is not problematic (Marsh, 1986), it should be noted that the phrasing of these items may have affected responses in an unusual manner. The prompt for these items was "How much time would you like to spend on the activity if given the chance?" For the physical abilities domain, spending more time on activities is related to positive conceptions of competence; practice makes perfect. On the other hand, for domains such as general school, math, and verbal, spending more time may be construed as putting forth more effort. Nicholls and his colleagues (Nicholls, 1978, 1984a, 1984b, 1989, 1990; Nicholls & Miller, 1984; Nicholls, Patashnick, & Mettetal, 1986) have determined that by the time individuals reach adolescence, they are likely to have developed entity conceptions of ability in which a greater expenditure of effort is indicative of a lack of ability. Therefore, the students in the present study may have rejected the notion of spending more time on, for example math, verbal, and emotional stability (working on and maintaining a relaxed, calm outlook on life) activities because to do so would imply an ability deficit in these areas. The average ideal involvement rating for the verbal domain is among the lowest of this type of rating; math, verbal, and emotional stability self-concepts are unrelated to ratings of ideal involvement in these areas.

For other domains, the ideal ratings may have had yet another meaning. The relation between general self-esteem and the honesty-trustworthiness ideal involvement rating was significant. But, for this domain, ideal ratings may indicate a sort of moral imperative, a "what <u>should</u> I do?" instead of "what am I committed to do?". The same might be said for the parent and social relations domains.

In addition to these problems, Harter (1986) cautioned against the use of importance items that tapped a "fantasy ideal" (p. 154). It may be that the

ideal ratings elicited such a response set. For these reasons, it may be that ideal involvement ratings are best considered in conjunction with the corresponding ratings of real involvement rather than on their own. The real involvement ratings might serve to provide the baseline that gives the ideal involvement ratings consistent meaning. Further research is needed to clarify the role of such combinations.

Conclusions

Two important limitations of this study should be noted. First, this study involved a relatively low number of participants. For the full regression equation, in which 43 variables were involved, the ratio of variables to participants was only about 4:1. A larger sample size would have been desirable to more adequately test the hypotheses under investigation.

In addition to the low number of participants, all of the participants in this study came from one school in a single, mostly white and middle-class, midwestern community. The hypothesized role of domain importance may have been supported more strongly had samples been drawn from a more diverse population.

In spite of these limitations, the results of this study suggest that the role played by domain importance depends on the domain of self-perception considered and how importance is assessed. With regard to main effects after controlling for the effects of domain-specific self-concepts, importance and involvement ratings contribute to the explanation of variance in general self-esteem only in a few domains. However, for those domains in which variability of responses for both self-concept and importance was highest (physical, artistic, and math), importance tended to interact with self-concept in the prediction of general self-esteem. Thus, the role of importance appears to depend on the heterogeneity of the domains and participants sampled.

Traditional importance ratings and ratings of real and ideal levels of involvement differed markedly in their patterns of effects. Main effects for traditional importance ratings emerged for seven of the fourteen specific domains tapped, but main effects emerged in only one domain for each of the real and ideal rating types. However, the interaction effects were significant for only two domains when importance was measured via the traditional ratings, and for six domains when the real or ideal ratings were used. These patterns indicate that different methods of assessing importance may be more appropriate for some domains than for others. For example, for domains in which performance skills are more relevant, such as physical abilities, music, and art, questions related to activity or involvement may be fitting. For other domains, such as emotional stability and honesty-trustworthiness, questions pertaining to involvement may be less relevant than questions related to importance per se.

Another critical issue relates to the use of general self-esteem as the dependent variable in these analyses. General self-esteem has been used in

this manner because it represents the apex in the hierarchical model of self-concept (Marsh, 1987; 1990; Shavelson et al., 1976). In addition, the Jamesian perspective holds that one's self-perceptions in different areas influence one's overall sense of self-worth (James, 1890/1963; Harter, 1986). However, Marsh (1993) points out that

> if the role of self-concept research is to better understand the complexity of the self, to predict future behavior and accomplishments, to serve as outcome measures, and to relate self-concept to other constructs, then specific domains of self-concept are usually more useful than a single global measure. (pp. 990-991)

Thus, even if importance does affect the relations between domain-specific self-concepts and general self-esteem, it is not clear that this influence is meaningful in practice. The general self-esteem construct has been criticized for its lack of relation to those aspects of self-perception, performance, and achievement that Marsh noted above (Marsh, 1990b), so to make it the litmus test for the value of domain importance to understanding self-concept may be unwise. Instead, more specific aspects of self-concept or variables such as achievement or performance may be more useful dependent measures.

Implications for Future Research

The role of domain importance should be more thoroughly explored in a number of ways. First, alternative methods of assessing and operationalizing importance must be investigated. For example, the real and ideal involvement ratings in this study proved more useful than the traditional ratings of importance. In the future, the role that other aspects of domain importance, like domain interest, play should be explored. In addition, combinations of the importance ratings should be tested. A discrepancy or other type of score could be calculated based on the real ratings and either the traditional importance ratings or the ideal involvement ratings. Perhaps the combination of these ratings could be more useful than any of these ratings alone (Marsh, 1993).

Second, the focus of studies designed to explore the role of domain importance should shift away from general self-esteem to more domain-specific measures of self-perception, achievement, and performance. These variables are most closely related to the questions of interest in most applied settings (Marsh, 1990b, 1993). Ultimately, it is in the best interests of researchers and of the students we study that the research emphasis in this field moves from the abstract and esoteric sphere of general self-esteem to the more concrete and specific domains of activity and self-perception.

Finally, domain importance should be assessed across a variety of ages. What is important at one age may be more or less so at another. Eccles et al. (1989) report that values for math, verbal, physical abilities, and social

relations domains change across the late elementary and junior high school years. It would interesting to note whether the same pattern of changes in domain value occurs when the transition is from elementary school to middle school rather than junior high. In addition, changes in domain values across the transition between junior high or middle school and high school or between high school and college have not been explored. Knowledge of these changes, and their relation to the effects of domain importance on the relations between self-concepts and other outcome measures, would indeed enhance our understanding of the nature of adolescence and the quality of self-perception.

Domain importance is considered to be a critical issue in self-concept theory because it may affect all aspects of self-concept theory and research. For example, domain importance could prove to be a necessary ingredient in future models of self-concept structure by mediating the relations between specific self-concepts and general self-esteem. Domain importance could also provide a vital link in our understanding of how and why interventions designed to enhance self-esteem succeed or fail. Likewise, a better understanding of the role domain importance plays in determining both specific and general self-perceptions could be beneficial in the development of future self-esteem-building programs. Thus, the further study of domain importance has considerable significance for both the theoretical understanding of self-perception and the practical applications of self-concept theory in educational settings.

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